



GUIDE
TO
MOVIE
MAKING
FUN

with your new **Bell & Howell**
WILSHIRE or MONTEREY
SUN DIAL
8mm MOVIE CAMERA



Use the self-addressed card on booklet cover to register your camera with Bell & Howell. Registration of serial number offer these advantages:



important!

- * Initiates the Bell & Howell Guarantee.
(It is *Void* unless your camera is registered with Bell & Howell.)
- * Entitles you to free correspondence counsel from our Personal Equipment Department at any time.

Welcome to Bell & Howell Ownership

Your Bell & Howell camera is designed to help you make professional-quality motion pictures with amateur ease for years to come. Behind your camera stands a half century of proven Bell & Howell photographic research and precision engineering.

Since 1907 Bell & Howell craftsmen have been building Hollywood's preferred equipment: these same skilled artisans make Bell & Howell 8mm and 16mm cameras and projectors.

The sharp, steady movies you get—in full natural color or sparkling black-and-white—are proof of Bell & Howell superiority.

To be sure you get the best performance from your Bell & Howell, study the following pages carefully with your camera in front of you. Then, when you put your new camera to work, you'll get well-composed, sharp movies from your very first try.

Please feel free to call on your Bell & Howell Dealer or write directly to us for further information. We stand behind our products—your purchases—always.

Bell & Howell
7100 McCormick Rd.
Chicago 45, Illinois

HOME MOVIE MAKING

with your new B&H camera

easy as 1-2-3

1 SET

Adjust Sun Dial
to match outdoor
light conditions.

Your camera is
automatically set!



2 SIGHT

Look through the all-
purpose viewfinder.
You'll see your subject
clearly outlined.



3 SHOOT

Press your finger down
on the starting button . . .
and you're making
movies!



TAKE A GOOD LOOK AT YOUR NEW CAMERA...

Before you do anything else, pick up your new Sun Dial camera. Examine it closely. Get the feel of it.



NOTE: All models of the Sun Dial cameras, are similar in appearance, operate identically, and have the same features, except for the lens speed, and the turret on the 252TA.

Look through the big picture-window view-finder.

Check the lens, making sure it is clean. If necessary, wipe your lens with a piece of lens tissue moistened with a drop of B&H Opti-Kleen fluid.

Turn the Sun Dial. Familiarize yourself with the location of the starting button, winding crank and film footage indicator.

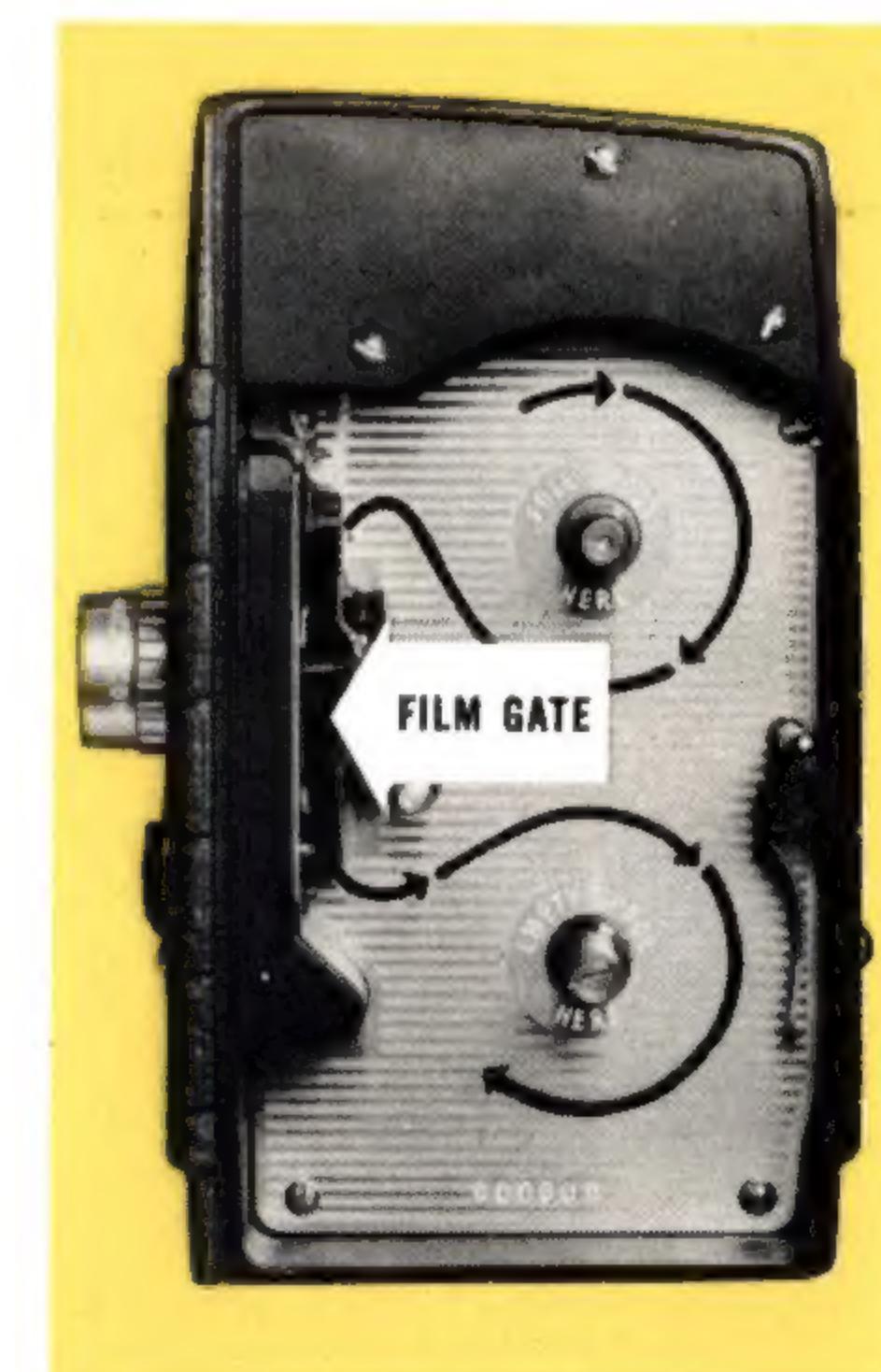


The camera door is easily removable. Just loosen the screw knob and lift off the door.

To close camera, press the door firmly into place, and tighten the knob. Closing door firmly provides light-tight protection for your film.

Inside your camera you will find two spindles. The base of the top spindle is marked "Full Spool Here"; the base of the lower spindle is marked "Empty Spool Here".

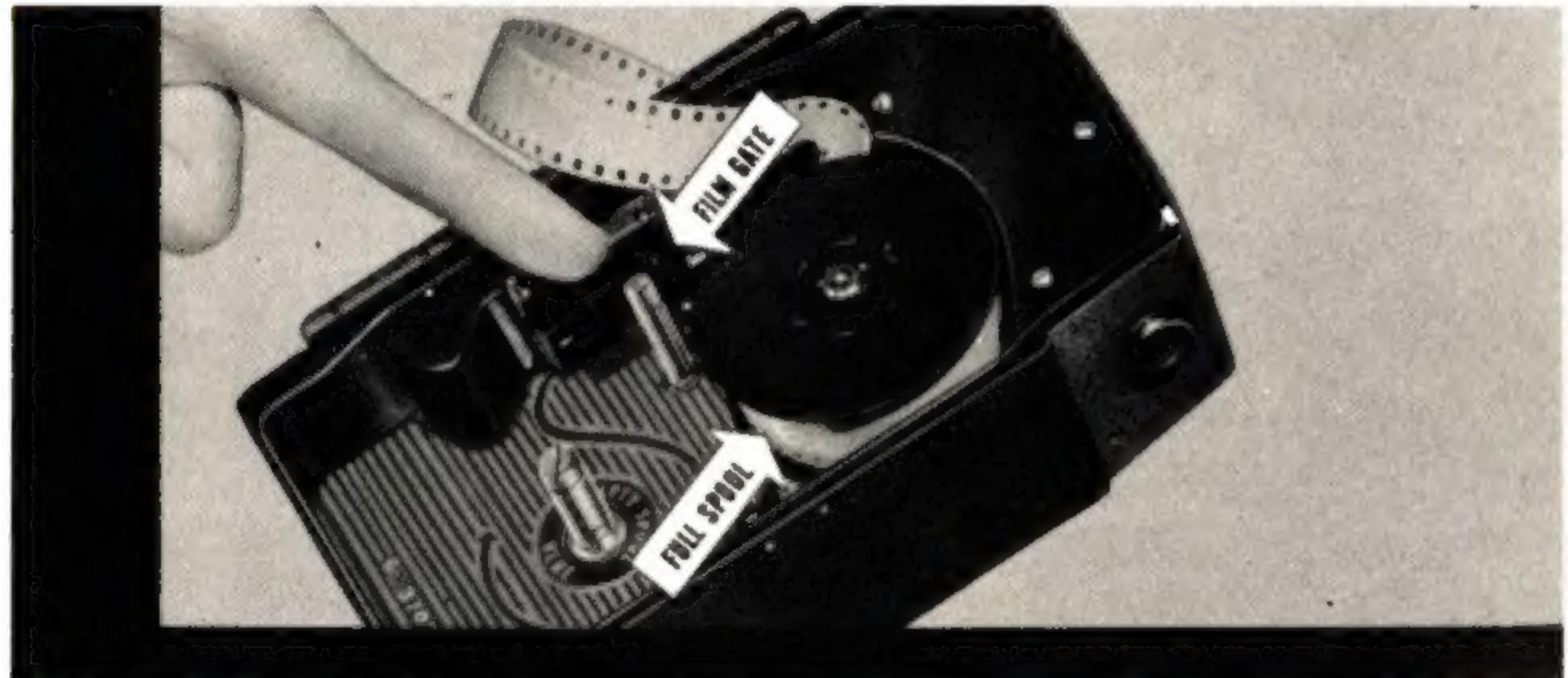
Curved arrows on the inside plate lead from the Full Spool spindle, through the Film Gate, and around the Empty Spool spindle. These arrows indicate the film path to follow when you load your camera.



LOADING FILM

Your Sun Dial camera uses any standard black-and-white or color 8mm roll film.

Before you load, wind your camera. Remove camera door and place camera in front of you with lens pointing away.

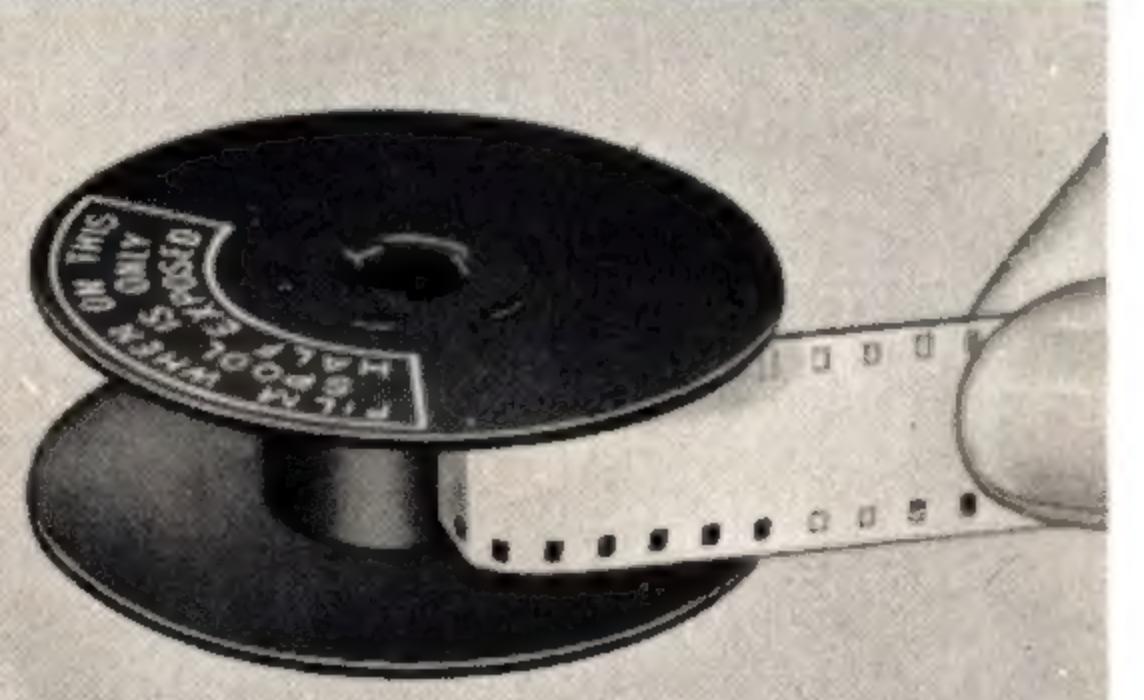


Unwind about 10 inches of film, keeping film taut on spool. Drop full spool of film over Full Spool spindle as indicated by film path arrows. Open Film Gate by pressing it toward spool. Feed film through gate.

The empty spool has notches around its center hole, 3 on one side, 4 on the other.

Hold the empty spool with the 3-notched side up. Crimp end of film and slip into spool hub slot to hold.

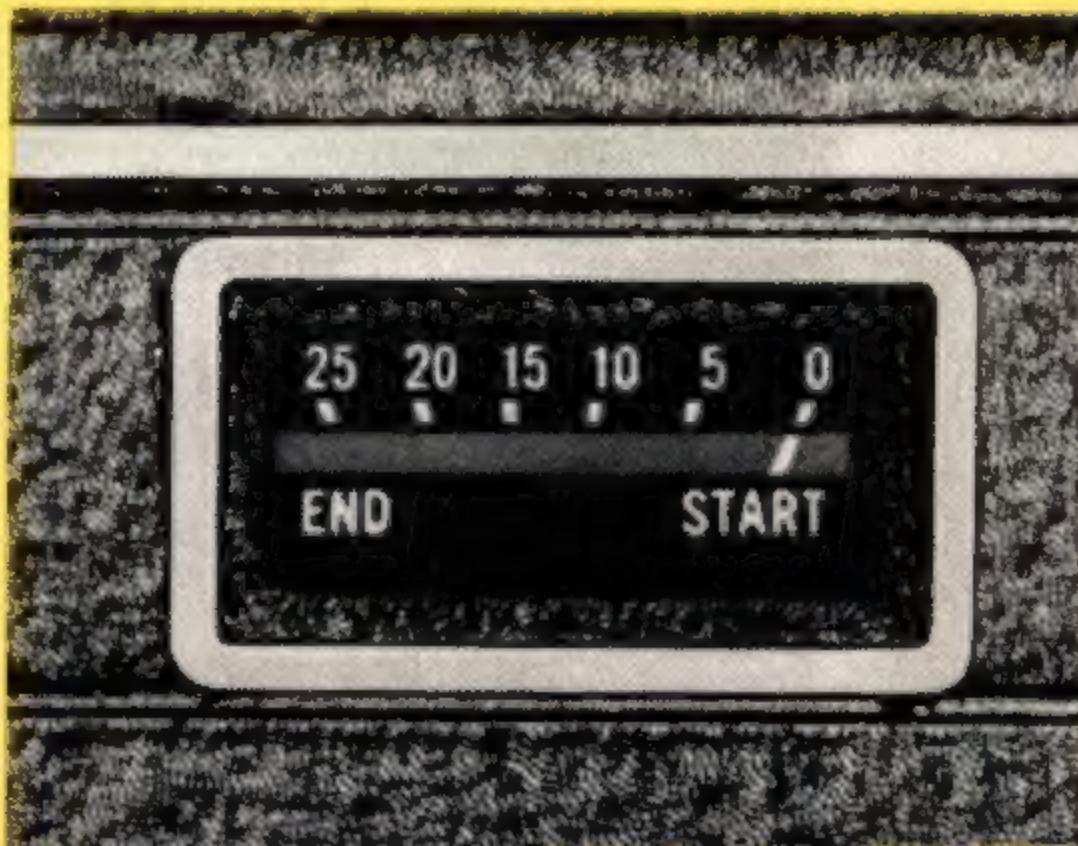
Turn spool clockwise two or three times to secure film end and take up slack. Place on Empty Spool spindle. Turn empty spool clockwise with fingertip to tighten film on hub. Close Film Gate.



This is the way your loaded camera looks. Full spool of film is on upper spindle. Film path follows curved arrows through closed film gate. Film is secured in hub slot of empty spool on lower spindle.

Before replacing camera door, run off 1 or 2 inches of film by pushing starting button down *momentarily*. Then replace the door securely and lock into position.

The Film Footage Indicator is automatically set when you load. Push the starting button down slightly and run film until indicator reads 0. Footage indicator operates automatically, tells you *how many feet you have used*.



USING SECOND HALF OF FILM

Each 8mm spool contains 50 feet of film (25 feet double-width). After you have exposed the first 25 feet of film as shown on the Film Footage Indicator, keep your finger on the starting button until the footage indicator goes out of sight. Now you're ready to reload.

Avoiding direct sunlight, remove camera door. Place the camera in front of you with the lens pointing away. Lift out the spool marked "Film when on this spool only half exposed." Remove empty spool from feed spindle. Proceed with loading for second half as instructed under "Loading."



WINDING YOUR CAMERA

Imagine yourself in the midst of shooting an important scene and your camera running down! This won't happen if you make sure your camera is *wound fully . . . before and after each scene.*

To wind your camera, lift winding crank and open it on its hinge. Wind with a clockwise motion as fully as you can. After winding, snap the crank handle into place in the small groove on the back of your camera.

Note: If the starting button is locked in the continuous-run position when your camera stops, *release the button before winding.*



Your camera will take 10 feet of movies on a single winding. It is factory-set to run at a steady speed, governor-controlled to prevent any slow-down at the end of the film run.

Even though you don't run off a full 10 feet, get into the habit of winding your camera as soon as you take your finger off the starting button.

SETTING YOUR SUN DIAL



The Sun Dial has separate settings for color and black-and-white film.

Decide what sort of daylight illuminates your subject (bright sun, hazy sun, light shade, cloudy dull.) Turn the Sun Dial until the mark for the type of film you are using is opposite the daylight description below the dial. Now you're ready to shoot.

If your subject is in shadow, even though the sun may be bright, set your Sun Dial for the amount of light *on your subject*.

On your Sun Dial you will also find numbers from 2.5 to 16 (on the Wilshire), 2.3 to 16 (on the Monterey), or 1.9 to 16 on the faster lens of the Monterey DeLuxe and turret models. Immediately above the dial and slightly to one side is a red arrow. When making color movies of extra-bright scenes (beach scenes, snow scenes, etc.), set the number 11 opposite the red arrow.

FOR SHOOTING INDOORS

Your dealer will supply you with an exposure guide for making indoor movies, according to the film you use. The numbers on your Sun Dial correspond to the f/numbers on the exposure guide. Just set the proper Sun Dial number (1.9, 2.3, 2.5, 2.8, 4, etc.) opposite the red arrow for shooting indoors. The Bell & Howell Movie Light Bar contains exposure information on the back plate.

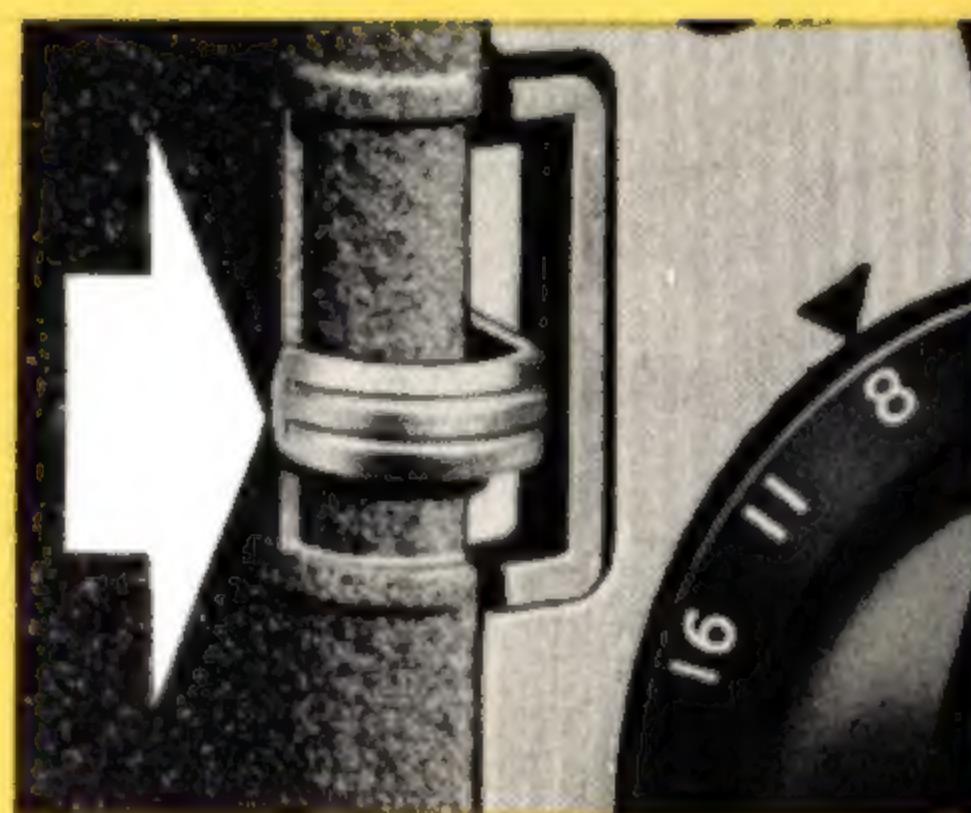
3-WAY

STARTING

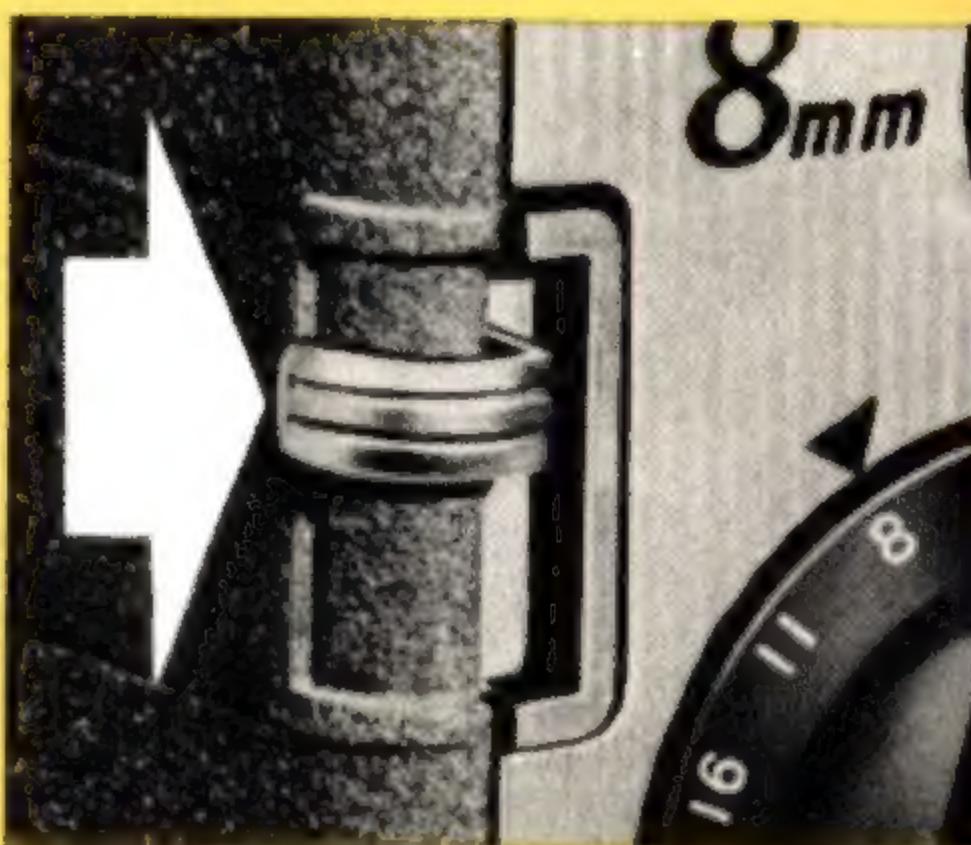
BUTTON

Pressing your finger *down* on the starting button causes film to run through the camera.

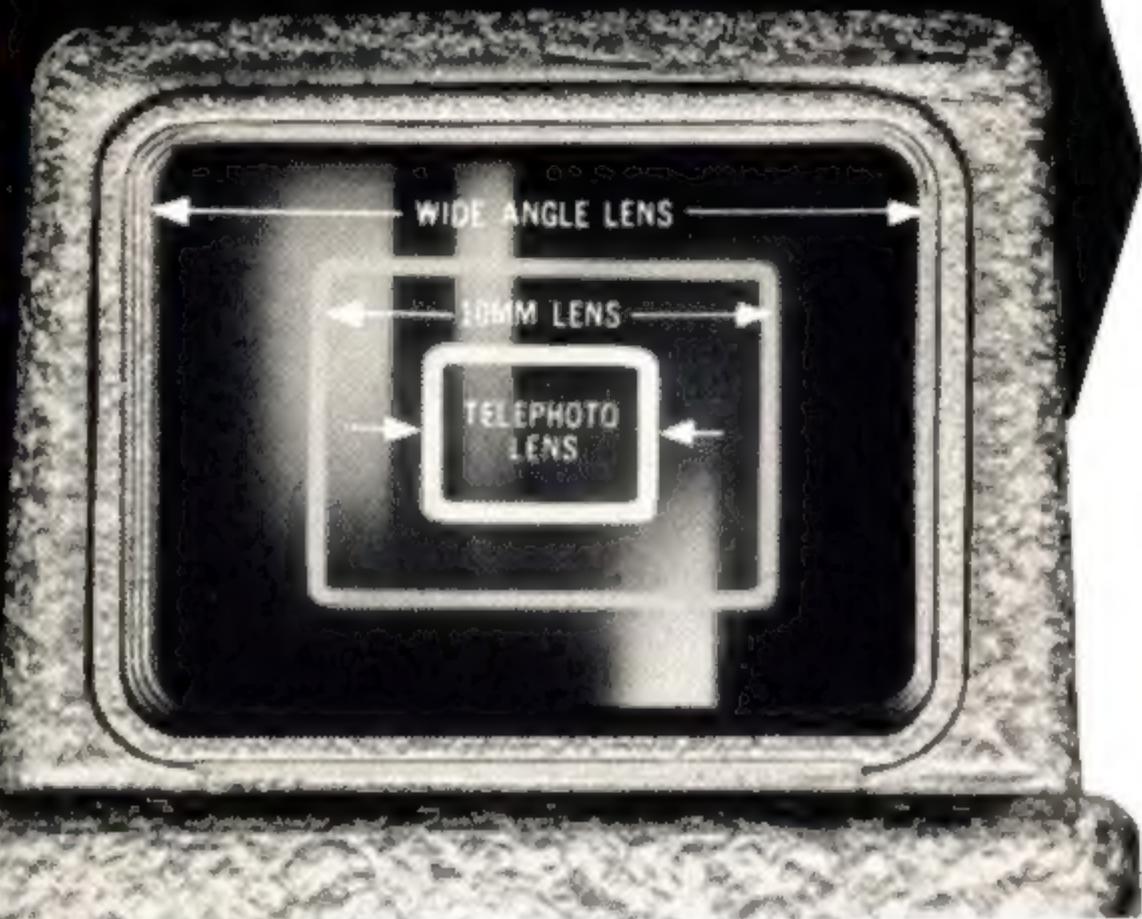
Exerting a little *extra* pressure down on the starting button *locks* the camera in continuous running position, allows you to get into the picture. To release the continuous-run lock, merely push up on the starting button.



Pushing the starting button *up* takes a single picture at a time. This is called "single-frame exposure." Use it for animation work or when the position of the subject changes only slightly over a long period of time (sunsets, extremely slow moving clouds) and you want to speed up the action in your movie.



ALL-PURPOSE VIEWFINDER



To make your camera more versatile, the all-purpose viewfinder has been designed to show 3 areas photographed by available lenses.

As you sight through the viewfinder you'll see what amounts to three different viewfinder windows incorporated into one. These viewing areas are used as follows:

WITH 10mm LENS

This is the lens mounted on all single lens models. Whether your camera is a single lens or turret model the larger RED rectangle seen in the viewfinder covers the area photographed with this lens. In turret models the Sunshade of the 10mm lens is color coded with a matching red band.

If your subject is 6 feet or more away from your camera, the picture within the red rectangle is the picture that will fill your screen.

WITH WIDE ANGLE LENS

The Wide Angle attachment lens is color coded in GREEN, and covers the entire area of the viewfinder. Since it covers 125% greater area at the same distance as the standard lens, you'll find it ideal for filming in close quarters where you want to include more in your picture.

WITH TELEPHOTO LENS

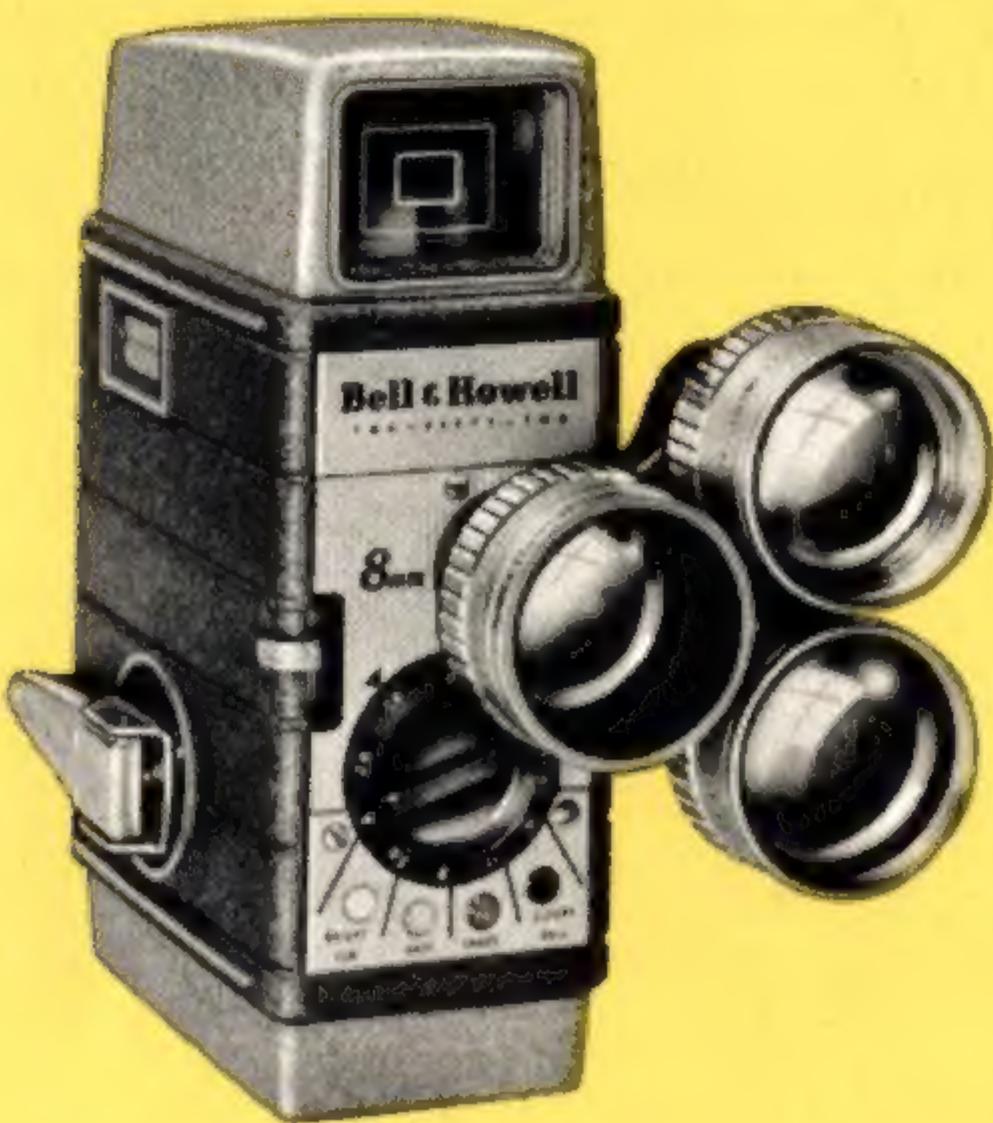
The small YELLOW rectangle seen in the viewfinder covers the area photographed by the Telephoto attachment lens. When using this lens, it will magnify your subjects $2\frac{1}{2}$ times, bringing distant subjects close-up.

CLOSE-UPS

When shooting close-ups of a subject 3 to 6 feet from your camera, make sure no part of your subject extends above the top line of the small (yellow) rectangle, with the standard 10mm lens, and no part of your subject extends above the (red) rectangle with the Wide Angle lens as illustrated. When using the Telephoto lens, (see how close you can get, page 14) make sure no part of your subject extends above the top $\frac{3}{4}$ of the yellow frame.



3-LENS TURRET MODEL



Each lens mounted on the turret has a colored ring around its barrel.

To select the correct lens, sight through the viewfinder and select the rectangle that frames the picture you want to record on your film. To position a lens on the turret, grasp the lenses, pull out, turn the turret until the desired lens is in shooting position.

The turret is equipped with a Filter Holder and Retaining Ring (RED) which is used with the standard 10mm f/1.9 fixed focus lens recessed beneath the turret. The turret also mounts a $1\frac{1}{2}$ X (6.5mm) Wide Angle Attachment (GREEN) and a $2\frac{1}{2}$ X (25mm) Telephoto attachment (YELLOW).

NOTE: The Retaining Ring supplied with the standard lens on the turret model will also fit either of the attachment lenses and accepts a Series 5 Filter.



HOLDING YOUR CAMERA

Hold your camera level when filming.

Raise camera and sight through the viewfinder eyepiece. Hold camera in left hand, placing your right index finger on the starting button. Brace elbows against side of body for greater steadiness.

MAKING A MOVIE

Whenever possible, take a series of shots to complete a movie story. Give your subject a little thought before actually filming it . . . how many feet of film you have to run . . . how many you want to use per scene.

In order to film a smooth-running story, shoot each scene for at least 7 seconds. A simple but surprisingly accurate way of gauging time is to count slowly, "one thousand, two thousand," and so on, each count being about one second in duration.

KEEP YOUR CAMERA CLEAN

A clean camera is a more efficient camera. After shooting a complete roll of film, open film gate and remove any collected dirt with a camel's-hair brush. Dislodge any hardened dirt with a wooden or plastic device. *Never use sharp tools.*

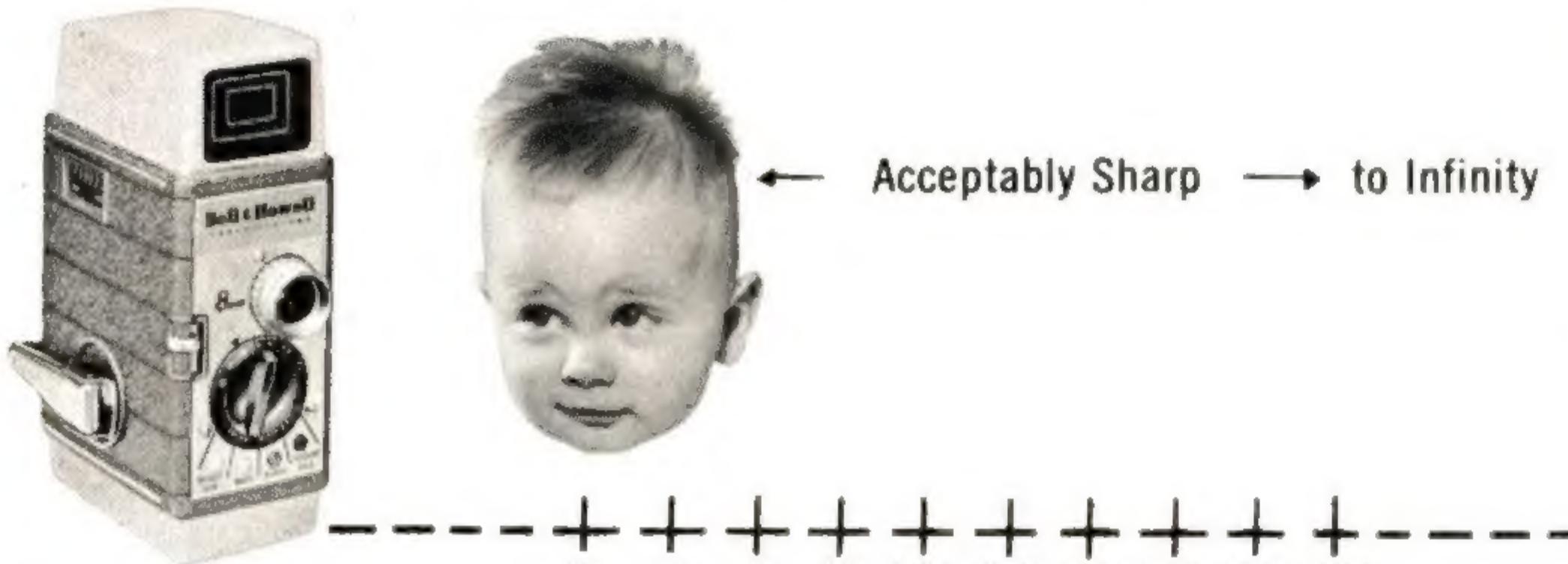
Clean your lens as necessary with B&H Opti-Kleen and a sheet of lens tissue or cleansing tissue.

SHUTTER SPEEDS

Camera Speed	16 frames per second
Shutter Speed	1/35 second
Single Exposure	1/28 second

HOW CLOSE CAN YOU GET TO YOUR SUBJECT?

Your Sun Dial camera has a universal focus lens, which eliminates any focusing adjustments. There may be times when you'll want to get as close as possible to your subject. The simple chart below gives the near limit of sharp focus which is determined by the amount of light on your subject at any given Sun Dial setting. The far limit of focus is permanently set at infinity.



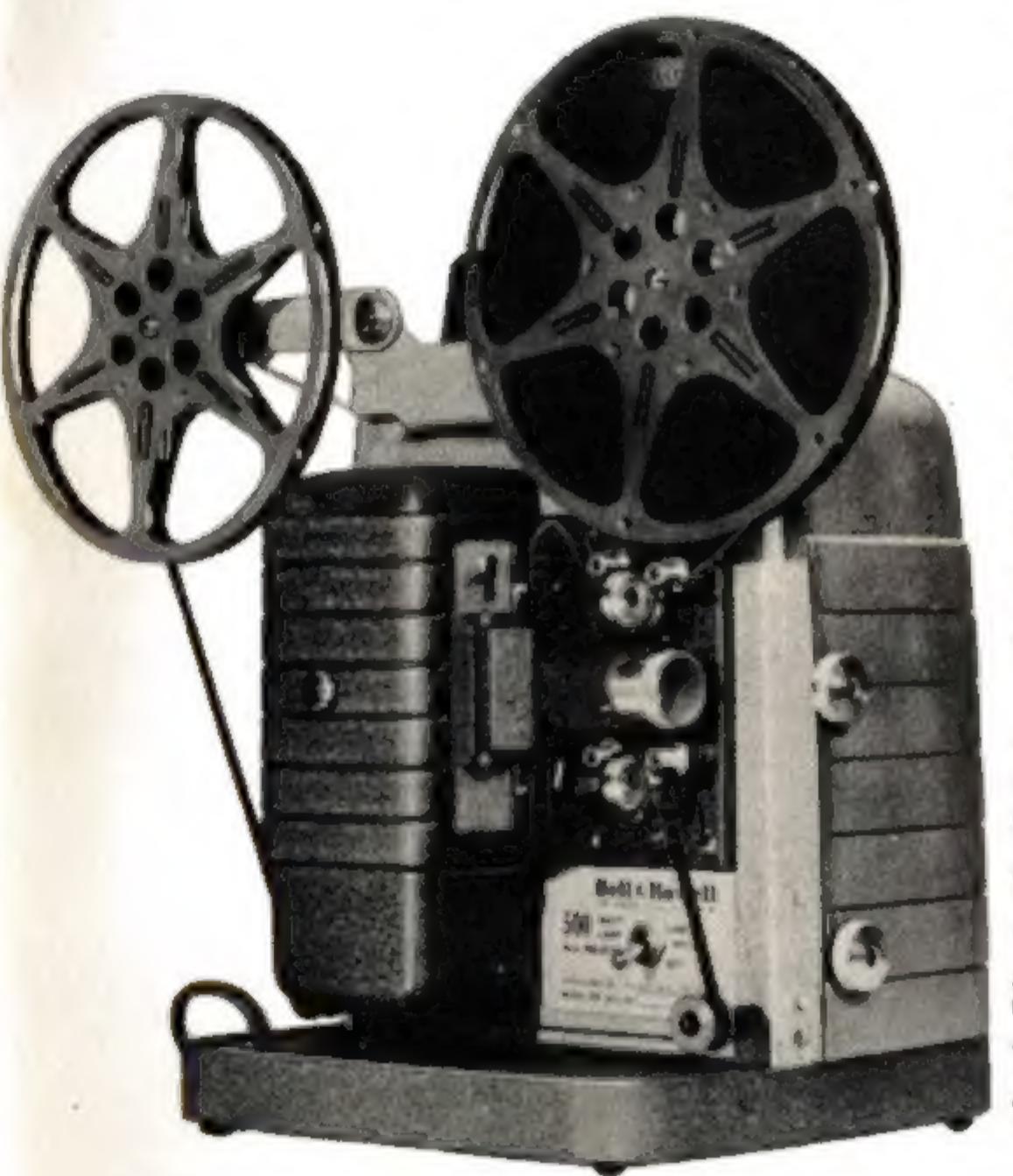
10mm lens set at f/8 (bright sun) subject in focus from 2 FEET TO INFINITY

Sun Dial setting	1.9	2.3	2.5	2.8	4	5.6	8	11	16
(10mm lens) You can get as close as—	6'		5'	4'	3'	2'		1'	
(Wide Angle) You can get as close as—	3'		2'		1'	9"	6"		
(Telephoto) You can get as close as—	30'	25'	23'	21'	17'	14'	11'	8'	6'
Sun Dial setting	1.9	2.3	2.5	2.8	4	5.6	8	11	16

MOVIE MAKING AIDS AND ACCESSORIES



TWO BRILLIANT PROJECTORS AT TRUE BUDGET PRICE



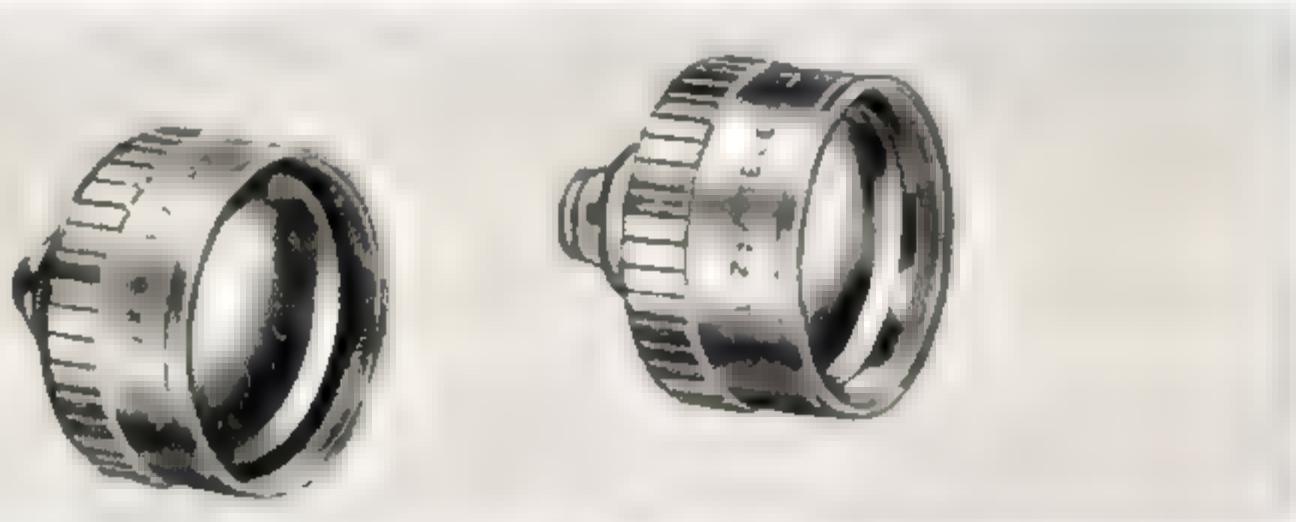
The Monterey. Enjoy brilliant, needle-sharp movie projection for exceptionally low cost. Simplest projector to use, the Monterey features rugged, die-cast aluminum construction, convenient built-in carrying case.

New Monterey Deluxe. Projects your movies in thrilling detail, reverses to repeat favorite scenes without re-threading. Still-picture projection, too. Compact, lightweight, take it anywhere.

- 400-foot capacity . . . half-hour shows
- 500-watt lamp . . . f/1.6 coated projection lens
- Simple swing-out lens mount makes threading easy
- Permanently lubricated . . . never needs oiling

ATTACHMENT LENSES FOR SINGLE LENS CAMERAS

The 10mm fixed focus lens on your Sun Dial camera was designed to accept Bell & Howell lens attachments. Both the Wide Angle and Telephoto attachment lenses available screw into the internal threading at the front of the lens barrel, and are easily positioned for immediate use. These lenses add fun and variety to your movies and can be purchased from your Bell & Howell dealer.



1½ X 6.5mm WIDE ANGLE ATTACHMENT

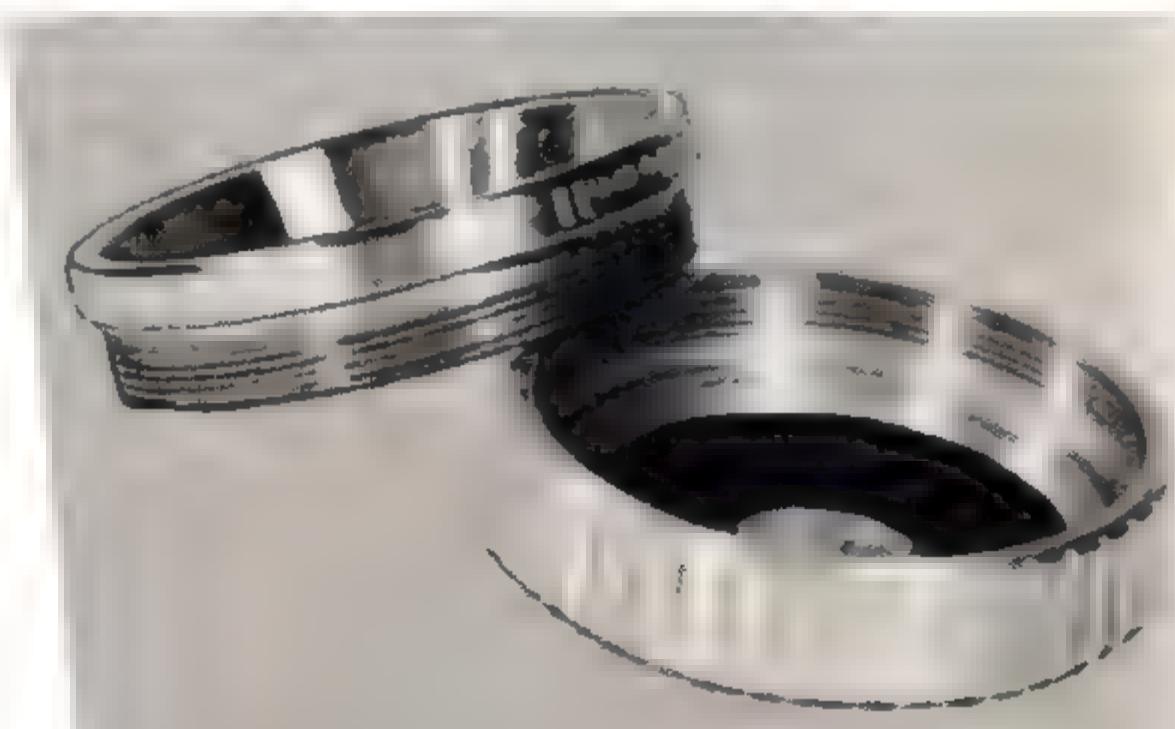
The Wide Angle attachment lens is color coded in green and covers the entire field of the viewfinder. Field coverage is 12% greater at the same distance as with the standard lens. Ideal for filming in close quarters where you want to include more in your picture.

2½ X TELEPHOTO ATTACHMENT

The Telephoto attachment lens is color coded in yellow and covers the smallest rectangle in the viewfinder. Brings your subject 2½ times closer, having the same effect on your movies as binoculars have on your eyes.

FILTER HOLDER

You can use any Size 5 filter with your camera when you screw the filter holder into the camera lens. Includes filter-retaining ring.



SHEATH CASE

Beautifully styled in top-grain London tan cowhide. Fits the contour of your camera firmly for greatest protection. Camera slips in and out quickly. Latches easily and securely.



COMBINATION CASE

Holds everything you need for movie making. Camera, Telephoto Attachment, filter holder, filters, extra film . . . held firmly in a handsome top-grain cowhide carrying case.



TRI-LENS TURRET CASE

Genuine top grain London tan leather case. Plenty of room for camera, extra film, and filters. Both sturdy and attractively designed to protect camera and lenses when not in use.



Slides complement

YOUR MOVIE ACTIVITY...

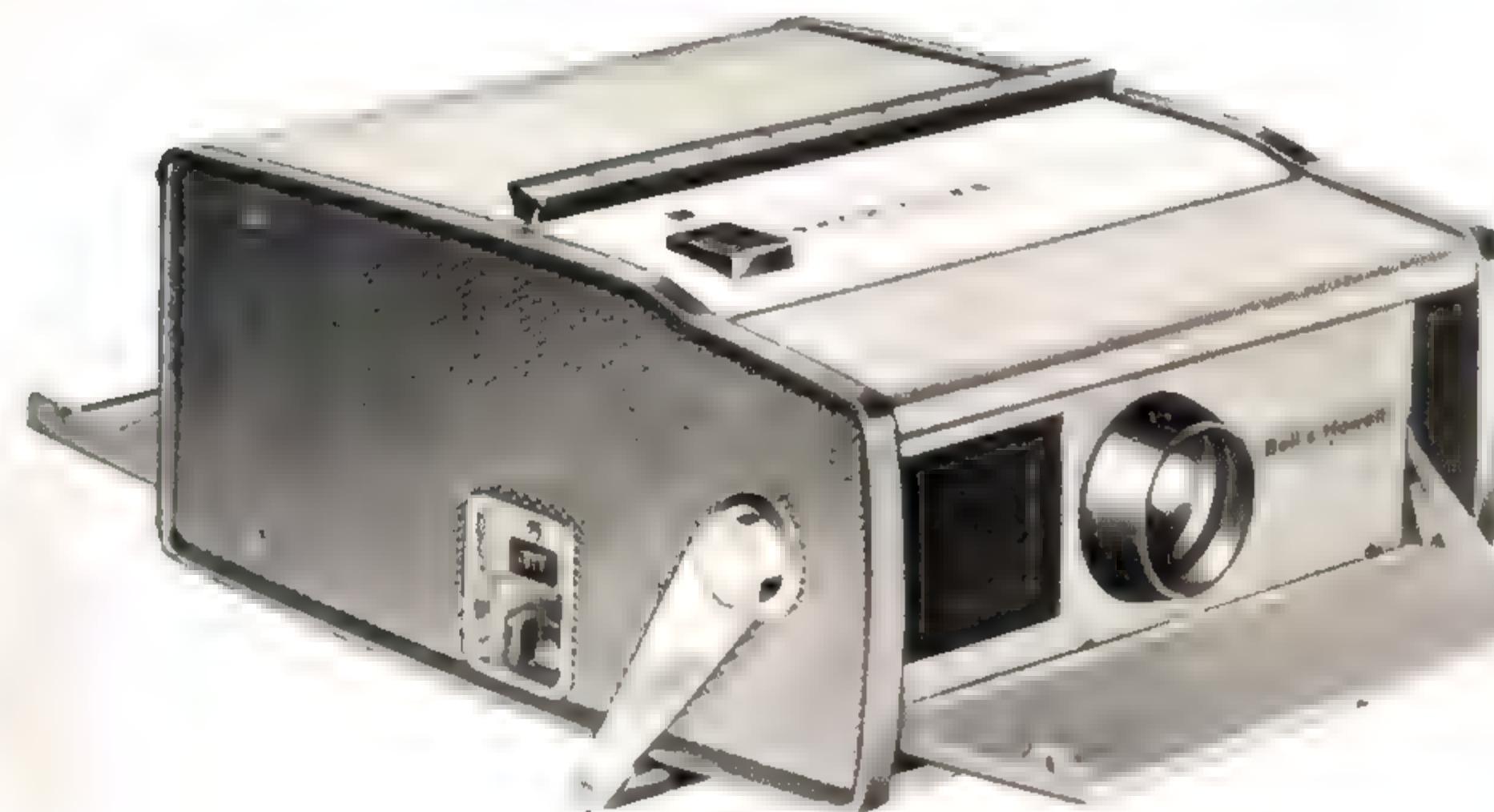
Ever looked at your movies and wished you'd shot the same subject in slides too? Each type of picture has its own appeal—each offers something special.

With a Bell & Howell slide projector you can give your slides the best projection in the world.

Made with the same painstaking craftsmanship which went into your Sun Dial camera, each model in the Bell & Howell slide projector line offers operational ease, handsome styling, sturdy construction, and the bright crisp screen image obtained with no other make of equipment.

There's a model to suit every need, every budget too—from the deservedly popular and modestly-priced Explorer 742 to the Explorer 754, the projector that runs the show for you.

Explorer AUTOMATIC SLIDE PROJECTOR



Here's the world's most advanced slide projector. Just slip in a tray and the projector shows, changes, and advances 40 slides quickly, quietly, and automatically. This remarkable projector is ultra-modern in every respect—years ahead in styling and performance. Shows 2x2, Bantam and superslides.

Bell & Howell Guarantee

This new Bell & Howell product is guaranteed to be free from imperfections in both material and workmanship for one year from date of original purchase. Should any part of this equipment be defective, it will be replaced or repaired free of charge (except for transportation), provided the equipment has been operated according to the instructions accompanying it.

No liability is assumed for film which is damaged or is unsatisfactory for any reason and no liability is assumed for interruptions in operation of equipment. This guarantee is void:

- a) If equipment has not been registered with Bell & Howell (please use card supplied);
- b) If equipment has been damaged by accident or mishandling;
- c) If equipment has been serviced by other than Bell & Howell approved service stations;*
- d) If adaptations or accessories other than Bell & Howell have been made or attached.

The foregoing is in lieu of all other warranties express or implied and Bell & Howell Company neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with this product.

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**Location of nearest approved service station will be furnished on request.*



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**ON ADDING
MORE INTEREST**

**TO
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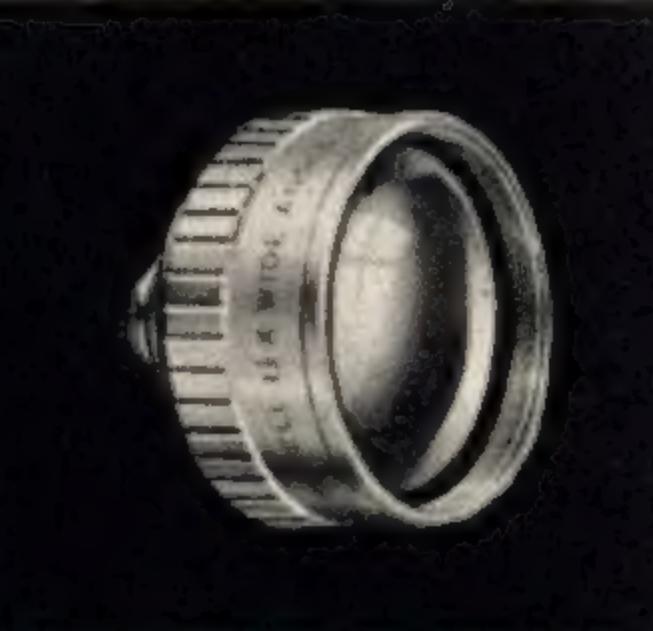


For extra movie-making thrills and a sure way to add variety to your movies, Bell & Howell

has two attachment lenses available for your new SUN DIAL camera.

This handsome leather case is provided for these two precision lenses; both are specially

designed for use with your Sun Dial camera.



NORMAL 10mm LENS

This is the fine standard 10mm lens on your new Sun Dial camera. Its picture area coverage is 56% greater than ordinary 8mm lenses. Thread either the Wide Angle or Telephoto lens into the normal lens, and you can take shots that would be impossible with your normal camera lens alone.

WIDE ANGLE ATTACHMENT LENS

Here's the lens that lets you: film a birthday party indoors, in a small room, and get everyone into the picture; shoot a wide, panoramic landscape for spectacular effect on your projection screen; include the entire playing field at sporting events—watch all the players in action.

TELEPHOTO ATTACHMENT LENS

Magnifies your subject 2 1/2 times, has the same affect on your movies as binoculars have on your eyes. Film children at play 25 feet away, natural and unposed, to bring them as close as though you were standing only 10 feet away. Shoot distant, colorful scenic shots or bring far-away action close up.



**FOR
THAT
HOLLYWOOD
TOUCH**

Try these lenses soon. You'll be amazed at the variety and interest you can add to your movies. Special effects, close-ups, panoramic scenes can all be included easily, quickly. Simply vary your lenses for a series of shots of the same scene, with new, fresh interest with every change.

**"DIAL THE SUN"
AND YOU'RE SET
TO SHOOT**

No additional adjustments are necessary when you use either the Bell & Howell Wide Angle or Telephoto lens with your SUN DIAL camera.

**SEE
YOUR
BELL & HOWELL
DEALER**

He will be pleased to show you these fine lenses. And keep this folder handy as a "gift suggestion" to your family for the next important gift occasion.

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